

Subbasin Plan Review Guide for ISRP, ISAB, and PRG Reviewers

May 26, 2004*

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This document includes web-links and pop-up comment fields and is best viewed electronically.

* Revisions: The March 19 version of this Guide was revised on April 6, 2004. Checklist Question I.B.3 was modified to add “spatial structure” to abundance and productivity. Question I.B.4. “genetic constitution” was changed to “genetic diversity.” The Logic Path flow chart on page 22 was edited to indicate that projects are part of the implementation phase of subbasin plans, and plans should focus at the strategy level. This Guide is a working document and slight changes to add clarity are likely to be made before May 28th and in the course of the scientific review. However, the substantive content of the review guide will adhere to the information requested of planners in the *Technical Guide for Subbasin Planners* and the 2000 Fish and Wildlife Program.

The April 6 version was revised on May 26 to clarify the use of guidance from the Pacific Northwest Aquatic Monitoring Partnership in developing the research, monitoring, and evaluation component of subbasin plans. See Section III.D of the Checklist, page 19.

Subbasin Plan Review Guide for ISRP, ISAB, and PRG Reviewers

Subbasin Planning

About sixty subbasin assessments and plans are being developed throughout the Columbia River Basin for the Northwest Power and Conservation Council (Council). These plans will be reviewed and adopted as part of the Council's Columbia River Basin Fish and Wildlife Program (Program). The plans will help direct Bonneville Power Administration (Bonneville) funding of projects that protect, mitigate and enhance fish and wildlife that have been adversely impacted by the development and operation of the Columbia River hydropower system. The Council, Bonneville, NOAA Fisheries and the U.S. Fish and Wildlife Service (USFWS) intend to use adopted subbasin plans to help meet requirements of the 2000 Federal Columbia River Power System Biological Opinion. NOAA Fisheries and the USFWS have stated their intent to use subbasin plans as a foundation for recovery planning for threatened and endangered species.

The plans are being developed locally and collaboratively among fish and wildlife managers, local governments, interest groups, and stakeholders and other state and federal land and water resources managers (where they have elected to participate). It is desired that final subbasin plans adopted by the Council enjoy a wide range of support from interested parties.

Review Questions and Criteria

The 2000 Fish and Wildlife Program calls for independent scientific review of proposed subbasin plans to help ensure that subbasin plans direct successful fish and wildlife and habitat actions. The combined Independent Scientific Review Panel (ISRP), Independent Scientific Advisory Board (ISAB), and Scientific Peer Review Groups (PRGs) will conduct the independent scientific review. The ISRP will chair the review. Subbasin plan review questions are provided in the 2000 Fish and Wildlife Program and the Council's August 2002 Notice of Request for Recommendations (for subbasin plans). Specifically, the ISRP/ISAB is asked to evaluate whether subbasin plans are consistent with the Fish and Wildlife Program and its Scientific Principles. The Council identified a list of seven issues that it seeks advice to assist it in determining the scientific soundness of recommendations proposed for adoption into the program:

1. Do the assessments appear to be thorough and substantially complete?
2. Are the subbasin goals, objectives, and strategies scientifically appropriate in light of the assessment and inventory of existing activities?
3. Does the plan demonstrate a linkage between the strategies, the biological objectives, the subbasin vision and the assessment?
4. Are the goals, objectives, and strategies consistent with those adopted in the program for the province and/or basin levels?
5. Do the plans demonstrate that alternate management responses have been adequately considered?

6. Does the proposed subbasin plan include a procedure for assessing how well subbasin objectives are being met over time?
7. Does the plan provide a scientifically supportable procedure for refining the biological objectives as new information becomes available about how fish, wildlife and the environment interact, and in relationship to how the plans are implemented over time?

These questions require reviewers to take a two-pronged review approach. Reviewers must evaluate: 1) whether the subbasin plans are complete and internally consistent following a transparent and defensible logic path; and 2) whether the subbasin plans are externally consistent with the vision, principles, objectives, and strategies contained in the Council's 2000 Fish and Wildlife Program and Mainstem Amendments. To conduct this evaluation, a review checklist and comment template is provided below. The list is derived directly from the Council's Subbasin Planning Technical Guide and includes the Council's review questions. The checklist asks reviewers to evaluate whether the plan satisfactorily provides the assessment, inventory, and management elements requested by the Council and, as necessary, to recommend the level of need to further treat a specific element of the subbasin plan before it meets the criteria of completeness, scientific soundness, and transparency. A report outline is provided below to illustrate the structure of final ISRP/ISAB/PRG reports. The checklists will be integrated in the final reports.

For the first prong of the review, the checklist/template includes the necessary background and review elements pertaining to scientific soundness and internal consistency, without cross-referencing the Technical Guide. However, to understand the context of the guidance provided to subbasin planners, reviewers should read the Technical Guide before beginning their review. Reviewers should also refer to the ISRP's figure describing the subbasin plan logic path provided at the end of the checklist/template. For the second-prong, pertaining to consistency with the Council's 2000 Fish and Wildlife Program, reviewers will need to understand and refer to the Program and in some cases the Mainstem Amendments. Those documents are too detailed and lengthy to adequately summarize in the checklist/template. Links to key planning documents are provided below.

The report outline and checklist/template are intended to help reviewers present comments in a hierarchical manner with primary findings presented in the Executive Summary and the start of each section, and lesser findings in subsections. The checklist serves several purposes. Its derivation from the Technical Guide and the Fish and Wildlife Program will aid reviewers in basing their reviews on the same set of criteria and expectations that was requested of subbasin planners. The checklist's detail should allow the twenty-five or more reviewers (many new to review of Columbia River Basin projects and issues) to review the plans in a consistent and disciplined manner. The checklist/template should also allow for the efficient compilation and comparison of individual reviewer evaluations and comments. Finally, like the scientific review schedule, the Council's post scientific review schedule is very ambitious. Provision of uniformly formatted ISRP/ISAB/PRG reports with checklists should allow the Council and planners to readily identify key issues that need further treatment and scope various approaches to respond to the scientific concerns, so that the program amendment process is as efficient and effective as possible.

Review Steps

The ISRP/ISAB/PRG subbasin plan review process is based on the review approach that was successfully implemented for the Fish and Wildlife Program's Provincial Review Process. The approach provides for independent review by individual reviewers, an opportunity for formal interactions with planners, and meetings between reviewers to discuss individual reviews and reach consensus findings. For a majority of the 58 subbasin plans, the ISRP/ISAB review process will begin immediately following the May 28th deadline and conclude with submittal of final reports to the Council by August 12, 2004 -- a total review timeline of two and a half months.

To complete the review, the ISRP/ISAB/PRG have established about ten review teams and one basinwide umbrella committee. The review teams are organized to review sets of subbasin plans grouped by province. Each team consists of six or more reviewers and includes a mix of ISRP, ISAB, and Peer Review Group members. At least three reviewers from the team will be assigned to review an individual subbasin plan. To best ensure that the review teams provide a consistent level of review scrutiny and comment quality, the ISRP/ISAB/PRG will establish a basinwide umbrella committee whose members share duties on: 1) attending review meetings and presentations, and 2) providing final reviews and edits of the various review team reports.

The ISRP/ISAB/PRG review tasks include:

1. Review of submitted plans by at least three reviewers beginning by the second week of June 2004. Individual reviewers will provide evaluations and comments in the checklist/template. ISRP staff will compile comments and checklist evaluations and make available only to review teams.
2. Meetings between the review teams and subbasin planners for presentations and discussions from June 14 through July 23, 2004 (see the meeting schedule below).
3. ISRP/ISAB/PRG internal discussion of subbasin plan following the presentation meeting.
4. Synthesis of review comments by a lead reviewer with assistance from ISRP staff.
5. Review of synthesized comments by the review team and the ISRP/ISAB/PRG basinwide umbrella committee.
6. ISRP/ISAB/PRG meeting to discuss the sets of draft reviews (July 27-29).
7. Submittal of final reports to Council by August 12, 2004. The final reports will be made publicly available on the Council's website by August 15.
8. Potential review of plan revisions, responses to the ISRP/ISAB/PRG reviews, or select scientific issues identified by the Council.

In addition, the ISRP/ISAB/PRG will likely draft a report detailing programmatic issues gleaned during the course of the subbasin plan review process. The report will discuss issues such as opportunities for coordination across subbasins and future refinement of analytical tools used for subbasin assessments.

Review Schedule

All presentation meetings are open to the public.

Reviewer meetings are for ISRP/ISAB/PRG members and ISRP staff only.

Dates	Day	Place	Item
4-Jun	Friday		Subbasin Plans Available for Review
WEEK 2: Yakima and Columbia Cascade			
14-Jun	Monday 1 PM to 5 PM	Yakima	Presentations: Yakima, Crab Creek, Palouse
15-Jun	Tuesday	Yakima	Finish Presentations and Reviewer Meeting
16-Jun	Wednesday	Wenatchee	Presentations: Entiat, Lake Chelan, Methow, Okanogan, Upper Mid-Columbia Mainstem, Wenatchee
17-Jun	Thursday	Wenatchee	Reviewer Meeting
WEEK 3: Inter-Mountain			
21-Jun	Monday		
22-Jun	Tuesday		
23-Jun	Wednesday	Spokane	Presentations: Coeur d'Alene, Pend Oreille, San Poil, Spokane, Upper Columbia Mainstem
24-Jun	Thursday; 8 AM to Noon	Spokane	Reviewer Meeting
WEEK 4: Salmon and Middle and Upper Snake			
28-Jun	Monday		
29-Jun	Tuesday	Boise	Presentations: Salmon, Boise, Bruneau, Burnt, Lower Mid-Snake Mainstem, Malheur, Owyhee, Payette, Powder, Upper Mid-Snake Mainstem, Weiser, Snake Headwaters, Upper Closed Basin, Upper Snake
30-Jun	Wednesday	Boise	Presentations continued and Reviewer Meeting
1-Jul	Thursday	Boise	Reviewer Meeting
2-Jul	Friday		
WEEK 5: Lower Columbia and Gorge			
6-Jul	Tuesday	Portland	Presentations: Big White Salmon, Klickitat, Lower Mid-Columbia Mainstem, Columbia Gorge, Fifteenmile Creek, Hood
7-Jul	Wednesday	Portland	Reviewer Meeting
8-Jul	Thursday	Portland	Presentations: Willamette; LCFRB: Columbia Estuary, Elochoman, Grays, Cowlitz, Kalama, Lewis, Lower Columbia River Mainstem, Wind
9-Jul	Friday	Portland	Reviewer Meeting
WEEK 6: OFF			
12-Jul	Monday		No Meetings
13-Jul	Tuesday		No Meetings
14-Jul	Wednesday		No Meetings
15-Jul	Thursday		No Meetings
16-Jul	Friday		No Meetings

WEEK 7: Columbia Plateau - Oregon

19-Jul Monday	La Grande	Presentations: Grande Ronde, Imnaha, Snake Hells Canyon
20-Jul Tuesday	La Grande	Reviewer Meeting
21-Jul Wednesday	Pendleton	Presentations: Deschutes, John Day, Umatilla, Lower Snake Mainstem, Tucannon, Walla Walla, Asotin
22-Jul Thursday	Pendleton	Presentations continued through noon; Reviewer Meeting follows
23-Jul Friday 8 AM to Noon	Pendleton	Reviewer Meeting

WEEK 8 Wrap-up Meeting for ISRP/ISAB/PRG Only

26-Jul Monday		
27-Jul Tuesday	Portland	Wrap-up Meeting
28-Jul Wednesday	Portland	Wrap-up Meeting
29-Jul Thursday; 8 AM to Noon	Portland	Wrap-up Meeting
30-Jul Friday		

WEEK 9: Final Report Compilation and Drafting

2-Aug Monday
3-Aug Tuesday
4-Aug Wednesday
5-Aug Thursday
6-Aug Friday

WEEK 10: Final Editing

9-Aug Monday
10-Aug Tuesday
11-Aug Wednesday
12-Aug Thursday

Final Report Due

Note: The Kootenai and Flathead subbasin planners will present their plans to the ISRP/ISAB in March 2004, but the ISRP/ISAB will review the plans at the same time as the other plans from May 28th to August 12th.

Key Documents

- Subbasin Planning Technical Guide: www.nwcouncil.org/library/2001/2001-20.htm
- Council's 2000 Fish and Wildlife Program: www.nwcouncil.org/library/2000/2000-19
- Council's Mainstem Amendments: www.nwcouncil.org/library/2003/2003-11.htm
- ISRP Review of the Draft Clearwater Plan: www.nwcouncil.org/library/isrp/isrp2004-4.htm
- Subbasin Planning Website: www.subbasins.org
- NOAA Fisheries interim targets for ESU's in a letter from NOAA to the Council, Bob Lohn to Larry Cassidy: www.nwcouncil.org/library/2002/nmfstargets2002_0404.pdf

Review Checklist and Comment Template Instructions

Note: provided below is a copy of the ISRP/ISAB/PRG review checklist/template. A separate electronic template will be provided for reviewers to record their evaluations and comments.

Please provide your review findings and comments in the separate checklist/template, and please skim this entire checklist/template before you begin your review. Your comments and evaluations will be compiled with other reviewer comments and discussed at an internal meeting. At the meeting, the review team will agree on consensus evaluations and comments. After the internal discussion, lead reviewers will be assigned to synthesize individual comments and draft a consensus document. The checklist/template includes macro cues and locked fields so individual reviewer comments can be efficiently compiled and distributed to review teams before meetings.

The checklist/template solicits specific review findings on the three components of a subbasin plan (the assessment, inventory, and management plan). An important caveat: the various components of subbasin plans may not follow the exact outline of the template below (they are not required to) but should contain information relevant to each of the subsections of the outline. Fill in the checklist/template in the sequence and at the level you find most natural given your assignment and the time you have to review the plan (e.g., some reviewers may be given lead review assignments and other asked to quickly review a plan to compare with another plan). Comment and evaluation fields are provided for each review element. Lead reviewers should provide evaluations (ratings in the two left columns) for each review element. Comment fields are provided for each element, but please provide comments only where you find necessary. Review teams will identify major strengths and weaknesses and other summary comments after discussion of comments and evaluations provided in the checklist/template. These comments will be provided in the Summary Section and as necessary in the Executive Summary of final ISRP/ISAB/PRG reports.

The Checklist

The first checklist column asks whether the plan adequately addressed a specific planning element requested in the Subbasin Planning Technical Guide. Evaluations are limited to a response of Y for yes, P for partial, or N for no. The second column asks reviewers to recommend the level of need to further treat a specific element of the subbasin plan before the plan meets the criteria of completeness, scientific soundness, and transparency. This review approach should assist the Council and planners in identifying and prioritizing their responses. An evaluation scale is described below. Evaluations are limited to this 0-4 scale. Reviewers are encouraged to elaborate on evaluations of the specific planning element in the general review comment sections, especially in cases where the level of need for additional treatment is high.

Some individual checklist elements have several components. If the plan partially addresses the components, please specify in the comment field which components were met or not met. For example, the question on lists of species (I.A.1.4) asks planners to identify ESA and non-native species, among others. If the plan doesn't include or identify a list of non-native species please indicate so in the comment field.

Need for Additional Treatment Evaluation Scale

0 - none. For example, the subbasin plan's treatment of this issue was complete, transparent and scientifically sound, and should lead to informed management of fish and wildlife resources in the subbasin.

1 - little to none. For example, the treatment of the issue is adequate:

a) because the plan justifies, in a transparent manner, a limited treatment of the issue due to the state of data and analysis in the subbasin and further justifies a scientifically sound approach to treat the issue in the future;

b) given the relative importance of the issue to scientifically sound management in the basin; or

c) in the context of the overall treatment of related issues in the plan.

2 - moderate. For example, the plan's approach to this issue was scientifically sound given the time, data, and analytical/decision support tools available, but the plan should better describe further treatment of this issue in the future. Alternatively, the approach and conclusion look sound but the process and decision-making behind the treatment of this issue needs to be better described (transparency).

3 - significant. For example, the plan did not adequately address this issue given the data and analytical/decision support tools available, but further effort on this plan, consistent with the approach taken in the plan, is needed before the plan can be deemed scientifically sound by the ISRP/ISAB/PRG.

4 - critical. For example, the plan did not address this issue in a scientifically sound manner. Significant remedial work and perhaps a new approach or methodology needs to be applied to the issue before this element of the plan can be deemed scientifically sound.

NA - not applicable.

Comments

Please draft comments in a constructive manner for a broad audience including subbasin planners, Council members, and the public. The more finished the initial individual comments are the easier the job will be for the lead reviewer to synthesize comments.

When applicable, please link comments to the Council's program (e.g., the Walkacrossbacks Subbasin Plan takes a consistent approach with the Council Program's strategy to "build from strength" and prioritizes habitat actions that build from areas that support relatively healthy and productive fish populations).

Outline for ISRP/ISAB Subbasin Plan Review Reports

- I. Executive Summary
- II. Introduction
- III. Summary Comments
 - A. Strengths of the Plan
 - B. Weaknesses of the Plan
 - C. Consistency with the Fish and Wildlife Program and its Scientific Foundation

- III. Specific Comments on the Assessment, Inventory, and Management Plan
 - A. The Subbasin Assessment (*generally pages 4-6, 9-10 and specifically 18-24 of the Technical Guide*)
 - 1. General and Summary Comments on the Assessment
 - 2. Review Checklist and Comments on Sections of the Assessment
 - a. Subbasin Overview
 - b. Focal Species Characterization and Status
 - c. Environmental Conditions
 - d. Ecological Relationships
 - e. Interpretation and Synthesis / Limiting Factors and ConditionsAlso for consideration: Socio-economic Themes

 - B. The Inventory (*pages 11-12 of the Technical Guide*)
 - 1. General and Summary Comments on the Inventory
 - 2. Review Checklist and Comments on Sections of the Inventory
 - a. Existing Protections
 - b. Existing Plans
 - c. Current Management Activities / Restoration and Conservation projects

 - C. The Management Plan (*pages 12-16 of the Technical Guide*)
 - 1. General and Summary Comments on the Management Plan
 - 2. Review Checklist and Comments on Sections of the Management Plan
 - a. The Vision for the Subbasin
 - b. Biological Objectives
 - c. Strategies (Prioritization and Consideration of Alternative Management Responses)
 - d. Research, Monitoring and Evaluation (Adaptive Management)

REVIEWER NAME: first name, last initial

Review Checklist and Comment Template

Specific Comments and Recommendations on the Three Main Components—Assessment, Inventory, and Management

I. The Subbasin Assessment			
<i>(See generally pages 4-6, 9-10 of the Technical Guide; the checklist is derived from 18-24 of the Technical Guide.) Reviewers should consider the soundness, completeness, analytical approach, and transparency (documentation of methods and decision-making process) of the following components of a subbasin assessment:</i>			
I. A. Subbasin Overview			
<i>General Question to be addressed: Does the assessment provide the geographical, demographical, and environmental context for fish and wildlife resources in this subbasin? The Council specifically asked that the independent scientific review evaluate whether the subbasin assessment was thorough and substantially complete. The following checklist is to aid reviewers in that determination.</i>			
I. A.1. General Description			<i>(Y)es, (P)artial, (N)o Need for Additional Treatment (0-4)</i>
I.A.1.1	Does the assessment provide a general orientation to the subbasin (location, size, distinguishing natural and cultural features, land use, land ownership) and an overview of jurisdictional authorities (state, county, federal lands, tribal lands and fishing rights)?		
	<i>Your comments here</i>		
I.A.1.2	Does the assessment provide a general description of the subbasin’s macro-environment (geology, climate and weather, land cover, vegetation) and of the subbasin’s water resources (hydrography and watersheds, hydrologic regimes, water quality, riparian and wetland resources), water uses, and modifications to water resources (hydropower projects and operations, water diversions, channel modifications)?		
	<i>Your comments here</i>		
I.A.1.3	Does the assessment provide a general description of anthropogenic disturbances to the aquatic and terrestrial environment, organized by the source of disturbance (urbanization, agriculture, forest practices, water development, mining, transportation, and other)?		
	<i>Your comments here</i>		
I.A.1.4	Does the assessment provide a list of native and non-native fish and wildlife species present in this subbasin including those species that: a. have been designated as threatened or endangered under the Federal Endangered Species Act or state equivalents, b. have been recognized by applicable federal, state, or local resource management agencies, or by the Nature Conservancy or state heritage program, as being especially rare or significant in the local area, c. have special ecological importance within the subbasin, d. are recognized by Native American tribes as having special cultural or spiritual significance, or e. are not native to this subbasin?		
	<i>Your comments here</i>		

I.A.1.5	Does the assessment identify plants that have been designated as threatened or endangered under the Federal Endangered Species Act or state equivalents, and/or that are recognized by Native American tribes as having special cultural or spiritual significance, or (optional) that have special ecological importance within the subbasin?		
	<i>Your comments here</i>		
I.A.2. Subbasin in the Regional Context		<i>(Y)es, (P)artial, (N)o</i>	<i>Need for Additional Treatment (0-4)</i>
I.A.2.1	Does the assessment adequately describe how this subbasin fits within its regional context (size in relation to the total Columbia Basin, placement within the ecological province and relationship to other subbasins in this province, qualities that distinguish this subbasin from others in the province)?		
	<i>Your comments here</i>		
I.A.2.2	Does the assessment adequately describe this subbasin's relationship to Endangered Species Act planning units (NOAA Fisheries-designated evolutionarily significant units (ESU) and U.S. Fish and Wildlife Service-designated bull trout planning units. ¹) where this information was available during the planning process?		
	<i>Your comments here</i>		
I.A.2.3	Does the assessment adequately summarize external environmental conditions that might have an effect on fish and/or wildlife in this subbasin (the ocean, the estuary, the mainstem downstream from the subbasin, and, as relevant, upstream areas and adjacent subbasins)?		
	<i>Your comments here</i>		
I.A.2.4	Does the assessment adequately identify macroclimate and human occupation and use trends that may affect hydrological or ecological processes in this subbasin over the long-term (50 years into the future and beyond)?		
	<i>Your comments here</i>		
	<i>Your summary comments and evaluation on the Subbasin Overview here: General Question: Does the assessment provide the geographical, demographical, and environmental context for fish and wildlife resources in this subbasin?</i>		

¹ The USFWS bull trout planning hierarchy includes, from large areas to small, distinct population segments, recovery units, recovery sub-units, core populations, core areas, and local populations. A subbasin would typically correspond to a recovery unit or sub-unit.)

I.B. Species Characterization and Status		(Y)es, (P)artial, (N)o	Need for Additional Treatment (0-4)
<p><i>General question: Does the assessment adequately describe the current status of fish and wildlife focal species?</i></p> <p>Note to reviewers: for this section of the review, the checklist should be applied to each focal species. Once the plans are received, assignments will be made to cover an individual species or a series of focal species.</p>			
<p>I.B.1. Does the assessment adequately identify a series of focal species that will be used to characterize the status of fish and wildlife species within the subbasin? These should include one or more wildlife, resident fish, and, where present, anadromous fish species. Anadromous fish may also be included in subbasins where they were historically present and where there is a reasonable probability that these fish could be restored to sustainable levels. Criteria suggested for selecting focal species include a) designation as Federal endangered or threatened species, b) local ecological significance,² and c) cultural significance.</p>			
	<i>Your comments here</i>		
<p>I.B.2. Does the assessment adequately identify and characterize focal species populations; i.e. delineate unique population units and, as applicable and where information is available, meta-populations, subpopulations and/or other genetic/behavioral groupings used by scientists or managers?</p>			
	<i>Your comments here</i>		
<p>I.B.3. Does the assessment describe the current and historic status of each focal species population and summarize available population data (abundance, productivity, spatial structure, etc., with particular emphasis on trend data)?</p>			
	<i>Your comments here</i>		
<p>I.B.4. Does the assessment adequately describe the population's life history, including identifying distinct life stages?</p>			
	<i>Your comments here</i>		
<p>I.B.5. Does the assessment adequately characterize the genetic diversity of the population, especially regarding possible effects of artificial production? Specifically does the assessment describe the historic and current status of introductions, artificial production, or captive breeding programs in this subbasin or affecting the subbasin through straying or other means, and describe the relationship between the artificial and naturally produced populations?</p>			
	<i>Your comments here</i>		
<p>I.B.6. Does the assessment adequately describe historic and current harvest, including both in-subbasin harvest and downstream or ocean harvest affecting the focal species?</p>			
	<i>Your comments here</i>		
	<i>Provide your summary comments and evaluation on the Species Characterization and Status Subsection here. General Question: Does the assessment adequately describe the current status of fish and wildlife focal species?</i>		

² Species that could be considered under the ecological significance criterion might include those that: a) are particularly rare within the subbasin (regardless of ESA classification), or b) perform a particularly important or unique ecological function.

I.C. Environmental Conditions			
<i>General question to be addressed: Does the assessment adequately describe the effect of the environment on fish and wildlife populations?</i>			
I.C.1. Environmental Conditions within the Subbasin		<i>(Y)es, (P)artial, (N)o</i>	<i>Need for Additional Treatment (0-4)</i>
I.C.1.1	Does the assessment adequately describe the current condition of the environment in this subbasin, and characterize the condition of the environment under the following reference conditions: a) historic, ³ b) potential, ⁴ c) future/no new action, ⁵ and the potential condition of aquatic and terrestrial habitats within the subbasin? Does the assessment include a determination of the difference between current conditions and the various reference conditions?		
	<i>Your comments here</i>		
I.C.1.2	Does the assessment adequately classify 6 th field HUCs within the subbasin according to the degree to which each area has been modified and the potential for restoration?		
	<i>Your comments here</i>		
I.C.2. Out-of-Subbasin Effects and Assumptions			
I.C.2.1	Does the assessment identify factors outside of the subbasin that have a significant effect on each focal species, with particular attention to bottlenecks? These might include effects associated with upstream conditions, downstream conditions, and, in the case of migratory wildlife, conditions in adjacent subbasins. Outside effects are particularly relevant for anadromous fish and may include mainstem passage and habitat, estuary conditions, ocean conditions, and harvest.		
	<i>Your comments here</i>		
I.C.2.2	For each focal species, does the assessment establish assumptions for each external effect that can be used to calculate the effects of external conditions on the productivity and sustainability of fish and wildlife within this subbasin?		
	<i>Your comments here</i>		
I.C.3. Environment / Population Relationships			
For each focal species, does the assessment adequately identify, for each life stage, environmental factors that are particularly important for the species' survival and determine the characteristics that constitute optimal conditions for species health? Does the assessment adequately describe and make a finding regarding the environment's ability to provide such optimal conditions, or conditions that support the long-term viability of these populations.			
	<i>Your comments here</i>		
	<i>Your summary comments and evaluation on the Environmental Conditions Section here: General Question: Does the assessment adequately describe the effect of the environment on fish and wildlife populations?</i>		

³ The historic condition refers to the state of the environment at the time of European settlement, or 1850.

⁴ The potential condition is defined as the optimal condition for the subbasin in the year 2050, but it acknowledges cultural modifications that are not reversible such as urbanization.

⁵ The future/no new action condition is the state of the environment in 2050 assuming that current trends and current management continues.

I.D. Ecological Relationships		(Y)es, (P)artial, (N)o	Need for Additional Treatment (0-4)
<i>Question to be addressed: Does the assessment describe the key inter-species relationships and the key functional relationships?</i>			
I.D.1. Inter-species Relationships			
Does the assessment adequately identify important inter-species relationships or interactions, both positive and negative, with specific attention to relationships between anadromous fish and wildlife and specifically identify: 1) wildlife species and habitats that may be influenced, positively or negatively through direct effects of changes in fish abundance or fish community composition; 2) fish species and habitats that may be influenced, positively or negatively, through direct effects of changes in wildlife abundance or wildlife community composition; and 3) key species relationships within this subbasin based on the above?			
<i>Your comments here</i>			
I.D.2. Processes and Functions			
Does the assessment adequately identify key ecological functions for species within this subbasin and assess the current status of ecological processes and functions in the subbasin?			
<i>Your comments here</i>			
I.E. Interpretation and Synthesis / Limiting Factors and Conditions			
I.E.1. Limiting Factors and Conditions			
Does the assessment adequately describe:			
1) Historic factors or conditions that led to the decline of each focal species and of ecological functions and processes?			
2) Current key factors or conditions within and without the subbasin that inhibit populations and ecological processes and functions relative to their potential.			
<i>Your comments here</i>			
I.E.2. Key Findings			
Is the knowledge gained through the assessment adequately synthesized in regard to: 1) the status of species, 2) the status of the subbasin environment, 3) the biological performance of focal species in relationship to the environment, 4) the health of the overall ecosystem, 5) potential conflicts and compatibilities between individual species and ecological processes, 6) a determination of the key factors that impede this subbasin from reaching optimal ecological functioning and biological performance?			
<i>Your comments here</i>			
I.E.3. Subbasin-wide Key Assumptions/Uncertainties (“Working Hypothesis”)			
Does the assessment describe the key assumptions (including uncertainties) that have been made in the “Key Findings” above, and document the data sources and/or analytical tools relied upon?			
<i>Your comments here</i>			
<i>Your overall impression and evaluation of the Assessment here. General Question: Does the assessment adequately synthesize the information regarding the health and functioning of this subbasin ecosystem? Does it adequately: a) bring together the single-species and community assessments to form a holistic view of the subbasin’s biological and environmental resources, b) provide a foundation for the development of scientific</i>			

	<i>hypotheses concerning ecological behavior and the ways that human intervention might prove beneficial? As needed elaborate on your evaluation of the various Sections enumerated above. If the plan provides additional analysis beyond what is laid out above in the checklist please comment here (e.g., socio-economic descriptions or analysis).</i>		
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II. The Inventory			
<i>(This checklist section was developed from pages 11-12 of the Technical Guide.)</i>			
<i>Reviewers should consider the soundness, completeness, analytical approach, and transparency (documentation of methods and decision-making process) of the following components of a subbasin inventory, specifically whether the inventory includes an assessment of the adequacy of current legal protections, plans, and projects to protect and restore fish, wildlife, and ecosystem resources. Does the inventory adequately synthesize past activities and their biological achievements? Planners were requested to, as applicable, describe the extent to which these programs and activities extend beyond the subbasin to a larger scale (provincial and basin-wide).</i>			
II.A. Existing Protection		<i>(Y)es, (P)artial, (N)o</i>	<i>Need for Additional Treatment (0-4)</i>
II.A.1	Does the inventory adequately identify areas with protections through stream buffers, municipal or county ordinances, conservation designations, or water resources protection?		
	<i>Your comments here</i>		
II.A.2	Does the inventory assess the adequacy of protections for fish, wildlife, and ecosystem resources?		
	<i>Your comments here</i>		
II.B. Existing Plans			
II.B.1	Does the inventory identify and review applicable local, state, tribal, and/or federal fish and/or wildlife management plans and water resource management plans that affect fish and wildlife?		
	<i>Your comments here</i>		
II.B.2	Does the inventory assess the extent to which existing plans are consistent with the subbasin assessment and their adequacy in protecting and restoring fish, wildlife, and ecosystem resources? (It is possible that this analysis is done in another section of the plan, e.g. in the management plan.)		
	<i>Your comments here</i>		
II.C. Management Programs / Restoration and Coordination Projects			
Does the inventory identify management programs implemented through on-the-ground restoration and conservation projects that target fish and wildlife or otherwise provide substantial benefit to fish and wildlife? These include, at a minimum, those implemented within the past five years regardless of funding source.			
II.C.1	Does the inventory identify ongoing or planned public and private management programs or initiatives that have a significant effect on fish, wildlife, water resources, riparian areas, and/or upland areas? ⁶		
	<i>Your comments here</i>		

⁶ Among other programs, the Technical Guide requested for artificial production programs that the inventory include and summarize relevant HGMPs (both BPA-funded and non-BPA funded programs) and Council APRE evaluations?

II.C.2	For each management program (or project where not clearly part of an overarching management program), does the inventory describe the program, project or activity; identify the management or lead entity; identify how the program/project was authorized and who is responsible for implementation; identify the funding source; and identify the relationship to other activities in the subbasin?		
	<i>Your comments here</i>		
II.C.3	For each management program (or project where not clearly part of an overarching management program), does the inventory identify limiting factors or ecological processes the activity is designed to address?		
	<i>Your comments here</i>		
II.C.4	For each management program (or project where not clearly part of an overarching management program), does the inventory summarize accomplishments/failures of activity		
	<i>Your comments here</i>		
II.C.5	Does the inventory adequately relate the assessment to the existing activities and identify the gaps between actions that have already been taken or are underway and additional actions that are needed to address the limiting factors and meet recovery and other goals, and identify inadequacies in both design and implementation?		
	<i>Your comments here</i>		
	<i>Your overall impression and evaluation of the Inventory here. As needed elaborate on your evaluation of the various Sections enumerated above. If the plan provides additional information or analysis beyond what is laid out above in the checklist please comment here (e.g., socio-economic descriptions or analysis).</i>		

III. The Management Plan

(Derived from pages 12-16 of the Technical Guide.)

Reviewers should consider the soundness, completeness, analytical approach, and transparency (documentation of methods and decision-making process) of the following components of a subbasin management plan.

These checklist tables incorporate Council Question 4, Consistency with the Provincial- and Basin-level Program: Are the vision, objectives, and strategies proposed in the subbasin management plan consistent with those adopted in the program for the province and/or basin levels? This is a three-part question and reviewers must be familiar with the vision, objectives, and strategies described in the 2000 Fish and Wildlife Program (pp. 13-33) and, for mainstem subbasin plans, the Mainstem Amendments (pp.11-28).

III.A. The Vision for the Subbasin Does the Vision Section of the Management Plan adequately 1) describe the desired future condition for the subbasin; 2) describe a vision that will drive development of the biological objectives and thereby the strategies that are incorporated to change conditions within the subbasin; and 3) incorporate the conditions, values and priorities of the subbasin in a manner that is consistent with the Vision described in the Council’s 2000 Fish and Wildlife Program? (Council Question 4 to the ISRP):	<i>(Yes, (P)artial, (N)o</i>	<i>Need for Additional Treatment (0-4)</i>
<i>Your comments here</i>		
III.B. Biological Objectives		
Does the Biological Objectives Section of the Management Plan adequately describe physical and biological changes within the subbasin needed to achieve the vision?		
<i>Your comments here</i>		
III.B.1. Are the biological objectives consistent with basin-level visions, objectives, and strategies adopted in the program? (Council Question 4) The 2000 Fish and Wildlife Program, pages 16-18, provides general descriptions for basin-level goals, objectives, and strategies. The Mainstem Amendments provide additional biological objectives as well on pages 11-14. ⁷		
<i>Your comments here</i>		
III.B.2. Are the biological objectives based on the subbasin assessment? (This question relates to the Logic Path in the subbasin plan. Question III.C.1 is a similar question for the Strategies Section.)		
<i>Your comments here</i>		
III.B.3. Where possible, are the biological objectives empirically measurable and based on an explicit scientific rationale; i.e., quantitative with measurable outcomes?		
<i>Your comments here</i>		
III.B.4. Are biological objectives identified for both the short and long-term?		
<i>Your comments here</i>		
III.B.5. Are the biological objectives complementary to programs of tribal, state and federal land or water quality management agencies in the subbasin?		
<i>Your comments here</i>		

⁷ Given the Fish and Wildlife Program’s emphasis on building from subbasin level management plans upward into provincial and basin level objectives, reviewers should evaluate whether the plans have a framework that will facilitate the development and linkage of objectives from the subbasin to the province to the basin.

<p>III.B.6. <i>Clean Water Act</i>: Does the management plan adequately describe how the objectives and strategies are reflective of and integrated with the water quality management plan and Total Maximum Daily Load schedule within that particular state? I.e., does this subsection of the management plan adequately assess and describe the consistency-coordination-findings of the Water Quality Plan with the subbasin plan?⁸</p>			
	<i>Your comments here</i>		
<p>III.B.7. <i>Endangered Species Act</i>: The USFWS and NOAA Fisheries are developing recovery plans for listed species (bull trout, white sturgeon, salmon). Recognizing that those ESA-based efforts are in various states of completion across the Columbia basin (some efforts are well underway, others just beginning), does the management plan adequately describe how the objectives of the subbasin management plan are reflective of and integrated with the ESA-based goals for listed species within the subbasin?⁹</p>			
	<i>Your comments here</i>		
<p>III.B.8. If there are disagreements among co-managers that translate into differing biological objectives, are the differences and the alternative biological objectives fully presented? (The Council’s review will examine whether the plan is consistent with legal rights and obligations of fish and wildlife agencies and tribes with jurisdiction over fish and wildlife in the subbasin, and agreed upon by co-managers in the subbasin.)</p>			
	<i>Your comments here</i>		

⁸ *Clean Water Act*: The Water Quality Management Plans developed for watersheds within each state includes the following information: 1) Management measures tied to attainment of TMDL; 2) Timeline for implementation; 3) Timeline for attainment of Water Quality Standards; 4) Identification of responsible parties; 5) Reasonable assurance of implementation; and 6) Monitoring and evaluation. The status of Total Maximum Daily Loads (TMDLs) is generally the responsibility of the state, which is delegated the responsibility for implementing the CWA. Each state has a schedule for completing TMDLs, which include a Water Quality Management Plan that describes how the allocations in the TMDL will be met. Basic information on TMDL’s can generally be found on the web (see Resources).

⁹ E.g. NOAA Fisheries has provided interim targets in a letter from NOAA Fisheries to the Council, Bob Lohn to Larry Cassidy: http://www.nwcouncil.org/library/2002/nmfstargets2002_0404.pdf.

III. C. Strategies¹⁰			
III.C.1. Internal Consistency of the Plan. Does the Strategies Section of the Management Plan explain the linkage of the strategies to the subbasin biological objectives, vision and the subbasin assessment? (Council Questions 2 and 3) ¹¹			
	<i>Your comments here</i>		
III.C.2. Consistency with the Fish and Wildlife Program. Are the Strategies proposed in the subbasin management plan consistent with those adopted in the program? (Council Question 4)			
	<i>Your comments here</i>		
III.C.3. Consideration of Alternative Management Responses. Does the Strategies Section explain how and why the strategies presented were selected over other alternative strategies (e.g. passive restoration strategies v. intervention strategies)? (Council Question 5) ¹²			
	<i>Your comments here</i>		
III.C.4. Prioritization. Does the Strategies Section describe a proposed sequence and prioritization of strategies?			
	<i>Your comments here</i>		
III.C.5. Additional Assessment Needs. Does the Strategies Section describe, if necessary, additional steps required to compile more complete or detailed assessment?			
	<i>Your comments here</i>		
III.C.6. Clean Water Act: Does the management plan adequately describe how the strategies are reflective of and integrated with the water quality management plan and Total Maximum Daily Load schedule within that particular state?			
	<i>Your comments here</i>		
III.C.7. Endangered Species Act: Recognizing that ESA-based efforts are in various states of completion across the Columbia basin, does the management plan adequately describe how the strategies of the subbasin management plan are reflective of and integrated with the ESA-based goals for listed species within the subbasin?			
	<i>Your comments here</i>		

¹⁰ *Definition:* Strategies are sets of actions to accomplish the biological objectives. Strategies are not projects but instead are the guidance for development of projects as part of the implementation plan. Strategies identified within the subbasin plans will be used as a basis for Council recommendations to the Bonneville Power Administration regarding project funding. Proposed measures will be evaluated for consistency with biological objectives and strategies. The strategies may be organized by categories of habitat, artificial production, harvest, hydrosystem passage and operations, and wildlife.

¹¹ This is one of the most important review questions. The set of seven questions from Council asks the ISRP to evaluate the internal consistency, scientific soundness, and thoroughness of subbasin plans. Internal consistency means there is scientific support for the conclusion that the strategies proposed in a subbasin plan will in fact address the problems identified by the subbasin assessment; i.e., does the Strategies Section take into account not only the desired outcomes, but also the physical and biological realities of the subbasin environment. The ISRP's Subbasin Plan Logic Path flow chart, attached below, provides a straightforward illustration of the logic path reviewers should look for in subbasin plans. Rick Williams, ISRP chair, developed and has presented this flow chart to subbasin planners around the basin, emphasizing the importance that subbasin plans demonstrate a clear logic path.

¹² The 2000 Fish and Wildlife Program directs that the subbasin management plan's strategy section must include an explanation of how and why the strategies presented were selected over other alternative strategies (e.g. passive restoration strategies v. intervention strategies). The Council does not expect subbasin plans to be structured like an Environmental Impact Statement with a list of alternative actions and descriptions of why each were not recommended. The Council's primary interest is on why and how a strategy was selected -- the rationale for the selected strategy -- which necessary includes some discussion of alternatives.

III.D. Research, Monitoring, and Evaluation

This RME Checklist Section provides the review elements necessary for the ISRP/ISAB to answer *Council Question 6. Plan for Assessing Progress toward Subbasin Goals*. The ISRP/ISAB is asked to determine whether a subbasin plan includes a procedure for assessing how well subbasin objectives are being met over time. This question focuses on accountability and self-assessment, and reflects on the adequacy of the Management Plan’s research, monitoring and evaluation component. This RME component needs to be closely connected to a limiting factors analysis and the biological and environmental objectives. A prioritized RME agenda reflecting the critical uncertainties and limiting factors should be developed and presented with the detail requested below (Technical Guide pp. 14-16). *NOTE: The focus of the RME component should be on the strategy level rather than individual project level.*

Subbasin planners were encouraged to incorporate, or link their RME framework and strategies with the “regional” RM&E strategies being developed by the Pacific Northwest Aquatic Monitoring Partnership and the Columbia Basin-Wide Research, Monitoring and Evaluation (RM&E) Program, a coordinated effort developed by State, Federal, and Tribal entities in response to the Basin-wide Salmon Recovery Strategy 2000 and the FCRPS 2000 Biological Opinion. Products from these regional RME efforts could be used to inform elements of a subbasin plan’s RME section (Technical Guide pp. 14-16). The subbasin plan should also explain how they incorporated existing monitoring guidance from state programs.

III.D.1	<p>Research: Does the RME section of the plan describe a research agenda with specific conditions and situations identified in the subbasin that will require specific research studies to help resolve management uncertainties? Is the research agenda framed around the relationships between the assessment data and the stated vision, biological objectives, and strategies in describing uncertainties? Does the RME section prioritize research topics that are of critical importance to the subbasin?</p>	(Yes, (P)artial, (N)o	Need for Additional Treatment (0-4)
<i>Your comments here</i>			
III.D.2	<p>Monitoring Objectives: Does the RME subsection identify what kind of information needs to be collected in order to determine if the plan’s vision and objectives are being met? I.e., what indicator variables will be monitored?</p>		
<i>Your comments here</i>			
III.D.3	<p>Monitoring Indicators: Does the RME subsection identify measurable indicators of physical, chemical, biological, or socioeconomic conditions that may act as environmental signposts by which progress towards achieving the stated vision can be evaluated? E.g., does the RME subsection describe performance standards or quantitative benchmarks for reference conditions against which observations can be compared? Does the plan prioritize which indicators are most needed to answer management questions (include a short list)?</p>		
<i>Your comments here</i>			
III.D.4	<p>Data and Information Archive: Does the RME subsection describe an infrastructure to archive relevant data and meta data generated through monitoring efforts in existence for the subbasin (e.g., locally or at a regional Fish and Wildlife Program funded database such as StreamNet, the Fish Passage Center, or DART)? Specifically, does the RME subsection include discussion of quality assurance/quality control (QA/QC), data management and analysis, and data reporting?</p>		
<i>Your comments here</i>			
III.D.5	<p>Coordination and Implementation: Does the RME subsection describe who will collect the information and data collection methods whether collection is done by a subbasin, provincial, state, or a regional entity, or a combination of entities? This should include a description of coordination with regional RME efforts in the basin (Regional Partnership, Action Agencies Research, Monitoring, and Evaluation Plan, etc) with standardization of data methods. It should also include estimates of how much the proposed M and E will cost.</p>		
<i>Your comments here</i>			

III.D.6	<p>Summary Question. RME Logic Path (Evaluation and Adaptive Management): Does the subbasin plan provide a scientifically supportable procedure for refining the biological objectives as new information becomes available about how fish, wildlife, and the environment interact, and in relationship to how the plans are implemented over time? (Council Question 7) Specifically, does the RME subsection describe a scientifically sound logic path for how to test if the subbasin plan’s strategies are helping to reach the stated vision and objectives? I.e., Is the RME agenda adequately framed around the relationships between the assessment data and the stated vision, biological objectives, and strategies in describing uncertainties?</p>		
	<p><i>Your summary comments and evaluation on RME Section here:</i></p>		
	<p><i>Your overall impression and evaluation of the Management Plan here. As needed elaborate on your evaluation of the various Sections enumerated above. If the plan provides additional analysis beyond what is laid out above in the checklist please comment here (e.g., socio-economic descriptions or analysis).</i></p>		

<p>General Council Question. Consistency with the Fish and Wildlife Program and its Scientific Foundation</p>			
<p>The Council asks the ISRP to evaluate a subbasin plan for its consistency with the Scientific Foundation adopted as part of the Program and with the requirements for “biological objectives” as described in the program. The core of the Council’s Scientific Foundation is a set of eight Scientific Principles:</p>			
<ol style="list-style-type: none"> 1. The abundance, productivity, and diversity of organisms are integrally linked to the characteristics of their ecosystem. 2. Ecosystems are dynamic, resilient and develop over time. 3. Biological systems operate on various spatial and time scales that can be organized hierarchically. 4. Habitats develop, and are maintained, by physical and biological processes. 5. Species play key roles in developing and maintaining ecological conditions. 6. Biological diversity allows ecosystems to persist in the face of environmental variation. 7. Ecological management is adaptive and experimental. 8. Ecosystem function, habitat structure and biological performance are affected by human actions. 			
<p><i>See 2000 Fish and Wildlife Program, pages 14-15 for full detail.</i></p>			
<p>Questions on consistency with the objectives and strategies section of the Fish and Wildlife Program are incorporated in the table above. Consistency with the Program’s scientific foundation is interwoven throughout the checklist, and this comment table provides reviewers a place to specifically summarize and identity how well the eight principles were addressed.</p>			
	<p><i>Your summary comments and evaluation on the subbasin plan’s consistency with the eight principles of the Fish and Wildlife Program’s Scientific Foundation here:</i></p>		

ISRP Flowchart: Subbasin Plan Logic Path

